

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

Bruce A. Van Note

December 4, 2023

Subject: improvements to Route 103

State WIN: 018653.00 Location: **Kittery Amendment No. 1** 

Dear Sir/Ms.:

Make the following changes to the bid documents:

In the bid book:

**Insert** APPENDIX E PROTECTION OF RAILROAD TRAFFIC AND STRUCTURES SPECIAL PROVISIONS totaling Ten Pages

**Remove** page 82 SPECIAL PROVISOPN 502 STRUCTURAL CONCRETE (QC/QA Acceptance Methods) dated November 7, 2023 and **Replace** with the attached SPECIAL PROVISON 502 STRUCTURAL CONCRETE (QC/QA Acceptance Methods) December 1, 2023

The following questions have been received:

**Question:** Sheet 17 shows signal head C3, but it is not included in the Traffic Signal Head diagram. Please indicate what type of signal this should be.

**Response:** Signal Head C3 is 3-Section with Red, Yellow and Green Circular indicators.

Consider these changes and information prior to submitting your bid on **December 6**, 2023.

Sincerely,

George M. A. Macdougall P.E. Contracts & Specifications Engineer

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# SPECIAL PROVISION SECTION 502

#### STRUCTURAL CONCRETE

(QC/QA Acceptance Methods)

CLASS OF	ITEM	DESCRIPTION	P	METHOD
CONCRETE	NUMBER			
LP	502.342	Structural Concrete Roadway Truck Apron	ı	C
A	502.345	Structural Concrete – Colored Pavement	1	C
A	502.35	Structural Concrete, Stamped Color	-	С
		Concrete Pavement		
A	608.08	Reinforced Concrete Sidewalk	1	C
A	608.26	Curb Ramp Detectable Warning Field	ı	С
A	609.16	Concrete Slipform Curb - Sloped	ı	C
LP	626.35	Controller Cabinet Foundation	-	C
LP	626.421	24 Inch Signal Pole Foundation	-	C
LP	626.46	48 Inch Signal Pole Foundation		C
			-	

P values listed above reflect the price per cubic yard (yd³) for all pay adjustment purposes.

The quantity used for Pay Adjustment purposes shall be the actual quantity of cast in place concrete placed and accepted. This quantity shall be computed by the Contractor and submitted to the Resident for approval.

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#### **APPENDIX E**

### PROTECTION OF RAILROAD TRAFFIC AND STRUCTURES SPECIAL PROVISIONS

#### 1. GENERAL REQUIREMENTS

Part of the work required by the Contract will be performed within a railroad right of way and/or adjacent to the tracks, telephone, telegraph, signal and electric supply lines of a railroad or railroads. The Contractor agrees to perform all such work in compliance with all of the terms of this Special Provision and all safety rules, regulations, or standards applicable to the Railroad. The Contractor shall be fully responsible for all damages arising from his failure to comply with the requirements of this Special Provision. The Contractor shall be deemed to have included all costs in the unit prices of the Schedule of Prices and the Proposal.

#### 2. AMOUNT OF RAILROAD WORK

The estimated amount of work to be done within (5 feet) of the track of **Springfield Terminal Railway** is 1% of the contract.

#### 3. NUMBER OF TRAINS AND TRAIN SPEED

The Contractor is notified that a maximum speed of ( $\underline{10}$  mph) will be considered as prevailing for the operation of trains of the Railroad at this project and that the approximate number of trains per day at this project is  $\underline{0-1}$ .

#### 4. PRIORITY OF RAILROAD OPERATIONS

The train movements of the Railroad, and its lessees, and licensees shall have absolute priority over the performance of the Construction Project within the railroad right of way. The Contractor hereby agrees that the hours and times of work within the Railroad right of way must be coordinated through the Railroad and that such hours and times are subject to change without prior notice to the Contractor, unless other prior arrangements have been made through the Railroad.

#### 5. AUTHORITY OF RAILROAD TO STOP WORK

If the Contractor fails to comply with the safety terms of this Special Provision, or if the Chief Engineer of the Railroad determines that the Contractor is using unsafe practices that threaten the safety of rail traffic, rail workers, or the general public, the Railroad

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shall have the right to immediately order the Contractor to cease work and vacate the Railroad's property. The Railroad agrees to confirm any cessation of work in writing by delivering to the Department's Construction Manager a completed Stop Work Order form attached as Exhibit A within 24 hours of giving any such order.

#### 6. ENTRY UPON RAILROAD PROPERTY

The Railroad hereby agrees to permit the Contractor, together with their subcontractors, suppliers, consultants and engineers (the "Contractor"), to enter upon the Railroad property for the purpose of performing the Construction Project, PROVIDED THAT the Contractor complies with all of the terms of this Special Provision and all safety requirements and directions of the Chief Engineer of the Railroad, or his authorized representative (the "Railroad's Chief Engineer").

#### 7. NOTICE REQUIRED BEFORE ENTRY

The Contractor shall give written notice to the Railroad's Chief Engineer at least <u>7</u> calendar day(s) in advance of the time it proposes to do work within the limits of the Railroad right-of-way or perform operations that may create a Hazard as specified by this Special Provision. The Contractor shall give such notice regardless of whether the work may also be within the limits of a public highway.

#### 8. HAZARDS

The Contractor shall assess to its own satisfaction hazards which may be caused by its operations. At a minimum, the Contractor agrees that the following shall constitute Hazards.

An operating track shall be considered fouled and subject to hazard when any object is brought nearer than (5 feet) to the gauge line of the near rail of the track.

A signal line or communication line shall be considered fouled and subject to hazard when any object is brought nearer than ( $\underline{4}$  feet) to any wire or cable.

An electric supply line shall be considered fouled and subject to hazard when any object is brought nearer than ( $\underline{10}$  feet) to any wire of the line.

Cranes, trucks, power shovels or any other equipment shall be considered as fouling and subjecting to hazard a track, signal line, communication or electric supply line when working in such position that failure of equipment, with or without load, could foul the track, signal line, communication or electric supply line.

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Railroad operation will be considered subject to hazard when explosives are used in the vicinity of railroad premises, or during the driving or pulling of sheeting for any footing adjacent to a track, or when erecting structural steel adjacent to a track, or when performing work under, across or adjacent to a track, or when operations involve swinging booms or chutes that could in any way come nearer then (15 feet) to the gauge line of the near rail of the track, or when erection or removal of staging, false work or forms fouls a track or wire line.

None of the operations specified as a Hazard above shall be carried on during the approach or passing of a train or without permission from the Railroad's Chief Engineer and the presence of a railroad inspector/flagman, unless other prior arrangements have been made through the Railroad.

#### 9. MINIMUM CLEARANCES

During the construction of staging, false work or forms, the Contractor shall at all times maintain a minimum vertical clearance of ( $\underline{22.5}$  feet) above the top of high rail and a minimum side clearance of ( $\underline{10}$  feet) from the gauge line of the near rail where track is tangent. Additional side clearance must be maintained where track is on a curve.

#### 10. WORK PLAN SUBMITTAL AND APPROVAL

The Contractor shall submit in writing to the Railroad's Chief Engineer or duly authorized representative, and the Department's Railroad Property Manager or his appointed representative, at least 30 calendar day(s) in advance of the start of the project, an outline of his plan for work within the Railroad right of way including contemplated method(s) of construction. This plan must meet with the approval of the Railroad's Chief Engineer and the Department's Railroad Property Manager in every respect. If the Contractor contemplates the use of "on the track equipment", it should so state and obtain from the Railroad the conditions pertaining to such operations. All Railroad costs included in this operation will be borne by the Contractor. In a like manner, any of the Contractor's equipment or material on cars for this project shall be handled in conformance with existing traffic rules with all costs borne by the Contractor.

Prior to submitting their Proposal, the Contractor shall have ascertained from the Railroad and from the Department's Railroad Property Manager or his appointed representative, all information relating to its requirements and regulations and all costs in connection with compliance thereto.

#### 11. EXCAVATIONS

Before excavation for footings adjacent to tracks and/or within the Railroad's right-ofway may commence, whether or not also within the limits of a public highway, plans and

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calculations for such excavations, prepared by a Professional Engineer authorized to practice in Maine, shall be submitted to the Railroad's Chief Engineer for review and approval. Unless other prior arrangements have been made, the Railroad's Chief Engineer shall have **2** week(s) to perform such review and approval and issue a written permission to proceed with the excavation. No excavation shall proceed without such permission.

At a minimum, excavations must utilize proper bracing, shoring, sheeting or other support as determined by the Railroad's Chief Engineer, to support the tracks with railroad traffic. Open excavation shall be suitably planked over when construction operations are not in progress. No excavation work shall be performed by the Contractor within the limits of the Railroad right of way, whether or not also within the limits of a public highway, until the Contractor has ascertained from the Chief Engineer of the Railroad the location of any wires, conduits, pipes, cables or other railroad facilities below the surface of the ground. Damage to any such facilities caused by the failure of the Contractor to ascertain the location of such facilities or by failure to use due care to avoid injury to such facilities shall be at the expense of the Contractor.

#### 12. EQUIPMENT

Equipment of the Contractor shall be in such condition so as to prevent failure that would cause delay in the operation of trains or damage to railroad facilities. Equipment shall not be placed or put in operation adjacent to a track without first obtaining permission of the Railroad. The Railroad agrees that such permission shall not be unreasonably withheld.

#### 13. RAILROAD SERVICES - GENERALLY

When work is to be performed within the Railroad's right-of-way, the Railroad shall provide the services, equipment and materials provided in this Special Provision including, but not limited to, engineering, flagging, inspection, signal protection and/or relocation, and restoration or replacement of the Railroad's track structure or ballast. Further, if the Railroad's Chief Engineer determines that the Contractor's operations do not comply with all of the safety requirements of this Special Provision and all safety requirements and directions of said Chief Engineer, the Railroad will employ the necessary qualified employees to protect its trains and other facilities. The Contractor shall pay to the Railroad the cost for performing all Railroad Services unless said costs are to be paid by the Department as specified in this Special Provision.

#### 14. INSPECTION / FLAGGING

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The Railroad shall furnish and assign all inspectors / flaggers for general inspection purposes of general protection of railroad property and operations during construction as the Railroad's Chief Engineer determines are necessary to preserve safety.

- (a) Responsibility for Cost. The Department will bear the cost of flagging or inspection (including travel time) or any combination thereof up to  $\underline{\mathbf{0}}$  man days of said flagging or inspection. If, in the opinion of the Railroad's Chief Engineer, further services of a flagger or inspector will be required due to the operations of the Contractor, the services will be furnished and the cost thereof (salary, expenses, insurance, taxes and vacation allowance, etc.) shall be paid to the Railroad by the Department, and will be recovered by the Department from the Contractor.
- (b) <u>Terms.</u> The minimum hours per day for the Railroad employees engaged in inspection flagging services shall be eight (8) hours. Time at rates for straight time, overtime or for deadheading starts in accordance with established practices in effect in the territory in which the project is located. Information as to these practices should be obtained from the Railroad's Chief Engineer.

The Contractor shall notify the Railroad's Chief Engineer and the Chief Engineer of the Department in writing 7 calendar day(s) before beginning, resuming or suspending work within (25 feet) of the track, so that an inspector may be provided or removed in accordance with the requirements of this Special Provision. An inspector may be removed upon 3 calendar day(s) notice. Failure to give notice of intent to suspend work shall be cause of charge to the Contractor the cost of inspection during the period when work is suspended.

(c) <u>Estimated Cost.</u> The following is an estimate of the cost per day of inspection/flagging necessary for this project. The rates shown include all overhead charges, travel time, deadheading and personal expenses.

#### Date of estimate <u>3/01/2020</u>

Estimated daily rate for four (4) consecutive hours Monday-Friday (straight time): \$ N/A

Estimated daily rate for four (4) consecutive hours Saturday, Sunday, Holiday (overtime):  $\frac{N}{A}$ 

Estimated rate for hours worked in excess of eight (8) hours in any one day: \$ N/A hour

Rates charged will be those in effect at the time of the performing the inspection/flagging which may be different than the rates used at the date of the Estimate. The Railroad agrees to notify the Department if rates used to calculate the above estimates change before the date of bids are received for this Contract.

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#### (d) Definitions.

Man day (M.D.) - eight (8) consecutive hours or any portion thereof.

Overtime - Each additional hour or fraction thereof consecutive to and beyond the standard man day will count as 3/16 of a man day.

Standard Man day - Eight (8) consecutive hour, Monday - Friday between the hours of  $\underline{7}$  a.m. to 3:30 p.m. unless otherwise noted and agreed to by all parties.

Travel Time - Time required by flagger and/or inspector to commute between his or her point of headquarters to the project site. This time shall not be charged in determining available man days.

#### 15. OTHER CONTRACTOR RESPONSIBILITIES

The restoring and resurfacing of tracks, if disturbed due to Contractor's operations, shall be at the expense of the Contractor.

Any other changes made or services furnished by the Railroad as a result of the Contractor will be at the Contractor's expense.

#### 16. EXTRA-CONTRACT SERVICES

Temporary and permanent changes of tracks and telephone, signal and electric supply lines made necessary by or to clear the permanent work of the Contractor as shown on the construction plans and included in the Railroad force account as recollectable from the State will be made or caused to be made by the Railroad without expense to the Contractor.

#### 17. INDEMNIFICATION

Where work is being performed over, under, across or adjacent to Railroad premises, the Contractor shall defend, indemnify and save harmless the Railroad and the Maine Department of Transportation from and against any and all loss, cost, damage, claims, suits, demands, or liability for damages for personal injury including death and for damage to property, which may arise from or out of the operations conducted under his contract, occurring by reason of any act or omission of the Contractor, his agents, servants or employees, or by reason of any act or omission of any subcontractor, his agents, servants or employees.

#### 18. INSURANCE

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In addition to any other forms of insurance or bonds required under the terms of the Contract, the Contractor will be required to procure and maintain, at its sole cost and expense, the following insurance coverages naming the Railroad as an insured.

- (a) Railroad Protective Liability Insurance with limits not less than \$2Million per single occurrence and \$6Million per aggregate total occurrences.
- (b) Comprehensive General Liability Insurance protecting against liability from bodily injury or property damage arising out of the Construction Project with limits of not less than \$2Million per single occurrence and \$6Million per aggregate total occurrences.
- (c) Workers Compensation and Occupational Disease Insurance, as required by law.
- (d) Automobile Liability Insurance covering all motor vehicles used about or in connection with the Construction Project.

If any part of the work is sublet, these insurance coverages shall be provided by or on behalf of the subcontractors to cover their operations

Each policy shall carry an endorsement covering the "save harmless" clause in favor of the Railroad and the Maine Department of Transportation, as set forth in the paragraph, "Responsibility for Damage Claims".

If blasting is to be done in the vicinity of the Railroad, the insurance policies shall include such coverage.

The policies shall be in force before any work is done on the project and shall remain in effect until all work required to be performed under the terms of the contract is satisfactorily completed as evidenced by the formal acceptance by the State and the Railroad.

Before any work is done on the project, the Department of Transportation and the Railroad's Chief Engineer shall be furnished certificates of each policy. Further, the original policy of the Comprehensive General Liability Insurance and the Railroad Protective Liability Insurance shall be furnished to the Railroad's Chief Engineer and a duplicate shall be furnished to the Department of Transportation.

The policy or policies of the Railroad's protective public liability and property damage liability shall be written by a Company authorized to do business in the State of Maine, and shall be signed by the President and Secretary of the Insurance Company and shall be countersigned by an authorized representative of the Company.

#### 19. ROADWAY WORKER SAFETY REGULATION

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Notice to all Contractors/Subcontractors and individuals must be aware of the Federal Roadway Worker Safety Regulation, CFR 49, Part 214(c). They may be required to comply with this regulation. Any requirements for them to comply will be discussed at the pre-construction utility meeting.

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## EXHIBIT A ORIGINAL TO CONTRACTOR

#### MDOT/RAILROAD STOP WORK ORDER

Section A - Contractor	Town					
	DOTE I I I I I I I I I I I I I I I I I I I					
	DOT Railroad Project #					
Railroad Name	Location					
	Notice #					
DESCRIPTION OF SAFETY HAZARD/REASON FOR ORDER						
Standard Violated	RAC (Risk Assessment Code)					
	N/R					
Railroad Official (Flagger/Inspector) Name	Date					
, 55						
Signature						
SECTION B - ACTION TAKEN:						

cc: MDOT - R.E. or Inspector

MDOT - Utility Section

MDOT - Construction Division Railroad - Chief Engineer

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- 1. <u>Risk Assessment.</u> Each identified/validated hazard shall be assigned a Risk Assessment Code (RAC) by the Safety Office. The RAC represents the degree of risk associated with the deficiency and combines the elements of hazard severity and mishap probability. The RAC is derived as follows:
- a. <u>Hazard Severity</u>. The hazard severity is an assessment of the worst potential consequence: Defined by degree of injury, occupational illness, or property damage, which is likely to occur as a result of a deficiency. Hazard severity categories shall be assigned by roman numeral according to the following criteria.
- (1) <u>Category I Catastrophic:</u> The hazard may cause death or loss of a facility.
- (2) <u>Category II Critical:</u> May cause severe injury, severe occupational illness, or major property damage.
- (3) <u>Category III Marginal:</u> May cause minor injury, minor occupational illness, or minor property damage.
- (4) <u>Category IV Negligible</u>: Probably would not affect personnel safety or health, but is nevertheless in violation of a NAVOSH standard.
- b. <u>Mishap Probability</u>. The mishap probability is the probability that a hazard will result in a mishap, based on an assessment of such factors as location, exposure in terms of cycles or hours of operation, and affected population. Mishap probability shall be assigned an Arabic letter according to the following criteria:
- (1) Sub-category A Likely to occur immediately or within a short period of time.
- (2) Sub-category B Probably will occur in time.
- (3) Sub-category C May occur in time.
- (4) Sub-category D Unlikely to occur.
- c. <u>Risk Assessment Code.</u> The RAC is an expression of risk which combines the elements of hazard severity and mishap probability. Using the matrix shown below, the RAC is expressed as a single Arabic number that can be used to help determine hazard abatement priorities.

	Mishap Probability				I	RAC
		A	В	C	D	1 - Critical
	I	1	1	2	3	2 - Serious
Hazard Severity	II	1	2	3	4	3 - Moderate
	III	2	3	4	5	4 - Minor
	IV	3	4	5	5	5 - Negligible